MEMORANDUM FOR: Deputy Director of Central Intelligence

SUBJECT   :   Agency ELINT Training Program

1. This memorandum recommends the establishment of an Agency
ELINT Training Program in support of CIA ELINT activities. The
Agency ELINT Advisory Committee has studied this proposal and submits
the recommendations in paragraph 5 for your approval.

2. On 29 May 1954 the Director approved the first Agency ELINT
Program. Since that time Agency ELINT activities have grown in scope
and number and have made a major contribution to national intelligence.
Since ELINT is a relative newcomer to the intelligence community, there
were, in the beginning, no standard operating procedures, and it was
necessary for the Agency to develop an ELINT capability to meet assigned
responsibilities in this new field. This effort has been successful.
However, the rapid strides being made in science and technology are
resulting in an ever increasing variety and complexity of electromag-
netic radiations with which ELINT deals. As a result, the intercept,
analysis, and evaluation of these radiations is becoming more and more
difficult; increasingly intricate and costly equipment is required
and operational techniques must be continually refined. This situation
places a growing responsibility on personnel associated with all phases
of the ELINT effort. It is clear that the quality and quantity of
the ultimate intelligence product is directly related to the capability
of those producing it - - and this capability is, in turn, largely

dependent on adequate training. Since the recruitment of trained
ELINT personnel is nearly impossible and since the military Services'
ELINT interests and philosophy are quite different than the Agency's,
it has been necessary for the Agency to train its own people. This
training has more or less paralleled the development of ELINT in CIA
i.e. an evolvement by chronological circumstances utilizing individual
component capabilities rather than a detailed overall plan. Experience
has shown that Agency ELINT training, although agreed to be important,
on the whole has not had the priority or support needed to accomplish
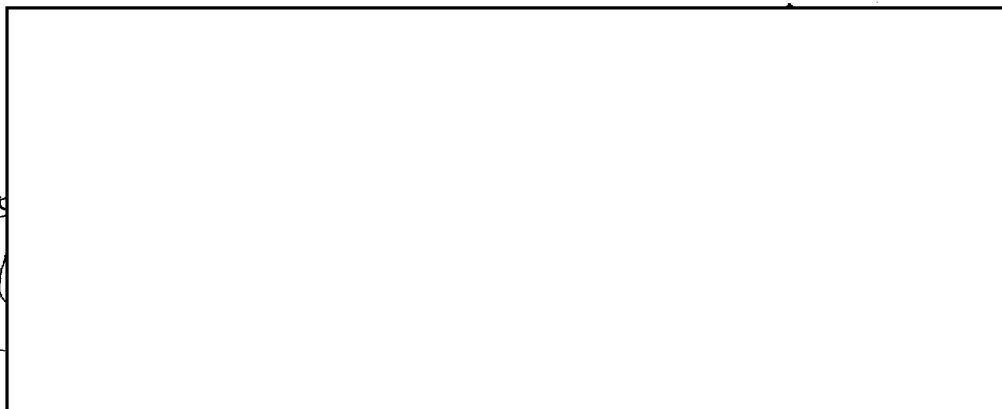more than sporadic, hasty, on-the-job training.

3. The recommendations in paragraph 5 result from a detailed
study of the Agency's total ELINT training requirements, an appraisal
of what Agency facilities now exist to satisfy these requirements and
an estimate of what additional support is needed to carry out the agreed
upon training program. This is not a proposal to embark on a new,
grandiose program since much of the necessary equipment, space, students
and instructors are already on hand.

4. Attached as Tab A is a statement of "CIA ELINT Training Require-
ments" listing the courses and briefings presently needed to prepare
Agency personnel for assignment to Agency ELINT activities. Tab A
also indicates what facilities are now available to support many of
these requirements. Tab B summarizes what additional facilities are
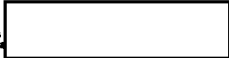needed and is the basis for the recommendations in paragraph 5.

5. The CIA ELINT Advisory Committee has studied the ELINT Training
situation and submits the following recommendations for your approval.

a/. The Office of Training (be directed to manage
the over-all Agency ELINT Training Program. OTR to
coordinate the instruction between the using offices and
training establishments, with funds, instructor personnel,
technical guidance, support and equipment provided by the
components concerned. (13 additional)

b/. A group of 18 slots be authorized as a develop-
ment complement for ELINT training. These to be allocated
as follows:

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a/. Funds in the amount of $ [   ] be provided to
supplement funds already budgeted by each component for ELINT
equipment and training costs. Tab C provides a breakdown of
these figures. These additional funds to be allocated as
follows:

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HERBERT SCOVILLE, Jr.
Chairman, ELINT Advisory Committee

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SUMMARY OF ADDITIONAL FACILITIES NEEDED

TO SUPPORT AN AGENCY ELINT TRAINING PROGRAM

MEN   :   13 new slots will be required to add to the 30 already on hand in the Office of Communications
             for use as development training slots for students and instructors. The new
             slots to be allocated as follows:

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MONEY   :   Accurate figures for the cost of external training are not yet available but it is estimated
             that a total of approximately $139,496 will be required to cover attendance at
             college courses, graduate work, short military and technical school courses,
             instructor recruitment and visiting senior consultants for seminars. $139,496

MATERIAL: Deducting what facilities are presently available from the total required by Tab A leaves
            the following amounts of equipment and facilities to be obtained.

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25X1

25X1   O/C [____] additional equipment

                         "   "

                     real estate

                     OSI equipment

                                                                        Total Additional Needed   25X1

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OSI Elint Training Program

OSI proposes _five_ training courses in Elint designed to meet the OSI Elint responsibilities and needs.

1. A basic course for new Elint personnel of OSI for duties with Agency Headquarters and for assignment to the [   ] 25X1 in Washington and similar intermediate centers abroad.

2. A refresher course for periodic retraining of the OSI Elint personnel aboard both within and outside the Agency.

3. Special selected college courses.

4. Advanced technique seminars.

5. Short term external training in selected subjects.

Course 1 - Basic Course for New Elint Personnel

Objective

To provide the trainees with a thorough understanding of the current Elint problems and issues in the areas of Elint data acquisition, Elint data processing, and Elint data applications to the production of intelligence, to develop thorough familiarity with the contemporary principles, concepts, methods and techniques in Elint data handling and processing and with the currently recognizable forward trends; and to develop thorough working familiarity with the Elint processing equipments and procedures as these apply to Agency Elint products.

Method of Training

A three month training course arranged on the following lines is recommended:
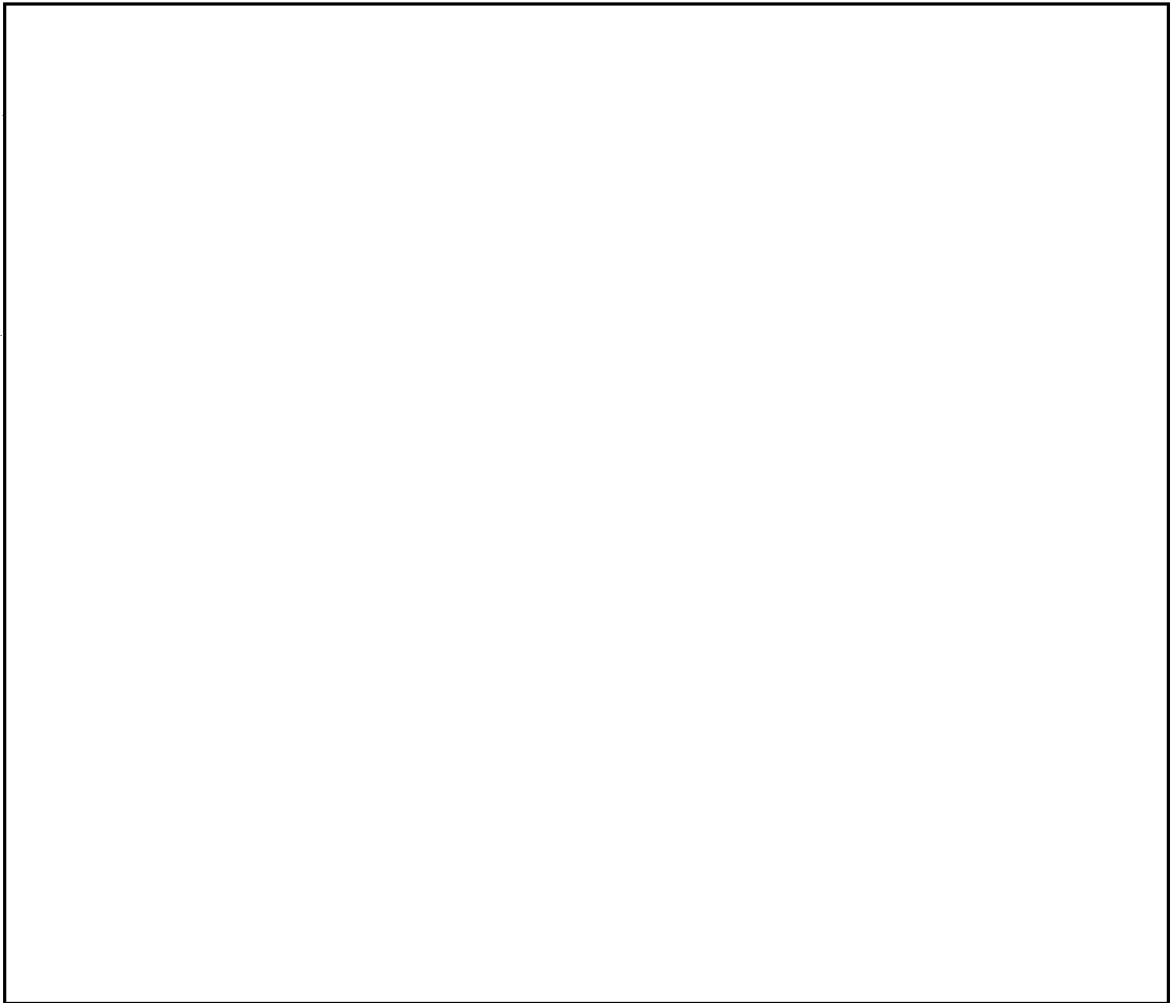
Part One   2 Weeks

a. A coverage of National and CIA collection capabilities - technical and geographical information.

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This may be reduced somewhat but at a detriment to the best training effectiveness.

For OSI needs, there should be a minimum of two positions with three being preferable. Each position would require 50 square feet of floor space. Some of the equipment may be available from other Agency Components.

Course 2 - Refresher Course for OSI Elint Personnel on Duty

Objective

This course is to provide the trainees with the most up-to-date information in the organization, operation and problems of all phases of CIA and National Elint efforts and provide an opportunity on a workshop principle, to handle specific problems as they relate to OSI areas

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of responsibilities in all aspects of acquisition and processing of Elint including research and development in Elint methods, procedures and facilities.

Method of Training

a. It is anticipated to use the laboratory training facilities of Course 1 on a selected basis.

b. On a work-shop basis it may be necessary to use the advanced facilities of other Elint activities.

c. A special course in advanced techniques and a study of future trends in both Elint collection and analysis. This will consist of a reading course of special reports prepared by external contractors and special briefings and instructions as appropriate by a qualified instructor.

It is estimated that Course 2 should last 4 to 6 weeks and would be held a minimum of twice a year and possibly more depending on the number of people returning to the branch who have not had this course within a two year period. Four people might be enrolled in the course at the same time.

Course 3 - Special Selected College Courses

Objective

To provide an opportunity for a few well qualified OSI Elint personnel to obtain advanced training in specialized subjects applying to advanced techniques of Elint analysis such as computers and computer programming, information theory, pulse techniques, some aspects of automation, etc.

Method of Training

Requirements of the trainee would be at least a BS degree in electrical or electronic engineering or physics with not less than two years Elint experience. The idea here is to raise the proficiency of a few highly qualified career service people in specialized subjects

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particularly applicable to Elint.

Course 4 - Advanced Techniques Seminars

Objective

To keep Elint personnel up to date on the latest Elint developments and techniques.

Method of Training

This would be a series of lectures by nationally known specialists in fields closely related to Elint. The thinking here is to keep these seminars confined to rather small selected groups so there would be ample chance for informal discussion at the end of the lectures.

Course 5 - Short term external training in selected subjects

Objective

To enable lower grade and less experienced Elint personnel to fill gaps in their academic education.

Method of Training

These courses would include such curricula as university night courses or possibly regular term courses in mathematics and new electronic techniques or correspondence courses in applicable subjects.

Training Slots

In order to keep OSI Elint personnel rotating through training and at the same time keep up the necessary work at both headquarters and field positions, it will be necessary for OSI to have four development or training slots assigned for Elint personnel. In addition, it will be necessary to have a permanent GS-14/15 slot assigned for the instructor in the OSI Elint training program. It is planned that the instructor will be furnished by OSI.

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OSI Course I

Basic Elint Analysis

Manpower Requirements

One Instructor - GS-14/15 slot required
OSI will furnish the instructor

Qualification - Electronic engineer with Agency experience
and a strong background experience in Elint.
A good speaker with teaching background.
Instructor will be required full time to
take care of OSI Course I and II.

Trainee Slot

See OSI requirements for all Elint training

Secretarial Support

1 GS-4/5 to cover all OSI training requirements

Budget Requirements

Instructor	$14,000	
Equipment	60,000	- (This covers Course I and II
Supplies and Support	10,000	OSI training requirements)
Total	$84,000	

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OSI Course II

Advanced Techniques in Data Processing and Intelligence Analysis

Manpower Requirements

One Instructor - Same as in Basic Course
OSI will furnish the instructor

Qualification - Same as in Basic Course

Trainee Slot

See OSI requirements for all Elint training

Secretarial Support

See Course I

Budget Requirements

See Course I

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OSI Course III

Special Selected College Courses

Special one to two year course in such advanced subjects as computers, information theory, pulse techniques, automation, etc.

Manpower Requirements

NA

Trainee Slot

See OSI requirement for all Elint training

Secretarial Support

NA

Budget Requirements

$12,500 per year based on one person each year

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OSI Course IV

Advanced Technique Seminars

Briefing by the best qualified people in Elint related subjects from industry, universities or service laboratories.

Manpower Requirements

6 men - one day each per year

Trainee Slot

See OSI requirement for all Elint training

Secretarial Support

NA

Budget Requirements

$15,000 per year based on $250 per man including travel and per diem

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OSI Course V

Short term external training in selected subjects
(university night courses etc.)

Manpower Requirements

   NA

Trainee Slot

   See OSI requirement for all Elint training

Secretarial Support

   NA

Budget Requirements

   Estimated 4 people per year at $250 - $1000

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OSI
PROPOSED TRAINING PROGRAM COSTS

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Type of Instruction	Location	Estimated Cost of Instructors, Lecturers, Advisers.	Approx Value of Electronic Equipment Now Available for Training Program	Estimated Cost of Additional Electronic Equipment Which Will Be Required	Estimated Cost For Personnel In Training	Incidentals
Course I Basic Elint Analysis	Undetermined - possibly at	$14,000	No equipment available at OSI Laboratory for strictly training purposes	$60,000		$10,000
Course II Advanced Elint Analysis	Same as Course I	Same instructor as Course I		Covered in Course I		Covered in Course I
Course III External Training in Universities	To be selected				$12500 cost for 1 person per year	
Course IV Seminars	Hqs	$1500 based on 6 people at $250 each including travel, per diem, etc.				
Course V External Training Selected Short Term Courses Such As University night courses, etc.	Washington D.C.				$1000 4 persons per year at $250 each	
Totals		$15,000		$60,000	$13,500	$10,000

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Total Initial Cost for 1st Year is $99,000